

POPULATION GROWTH IN THAILAND

(SECOND EDITION)

Manpower Planning Division
National Economic Development Board

National Family Planning Program
Ministry of Public Health

Institute of Population Studies
Chulalongkorn University

1972

On March 17, 1970 the Royal Thai Cabinet announced an official national population policy which stated:

“IT IS THE POLICY OF THE THAI GOVERNMENT TO SUPPORT VOLUNTARY FAMILY PLANNING IN ORDER TO HELP TO RESOLVE VARIOUS PROBLEMS RELATED TO THE VERY HIGH RATE OF POPULATION GROWTH, WHICH CONSTITUTES AN IMPORTANT OBSTACLE TO THE ECONOMIC AND SOCIAL DEVELOPMENT OF THAILAND.”

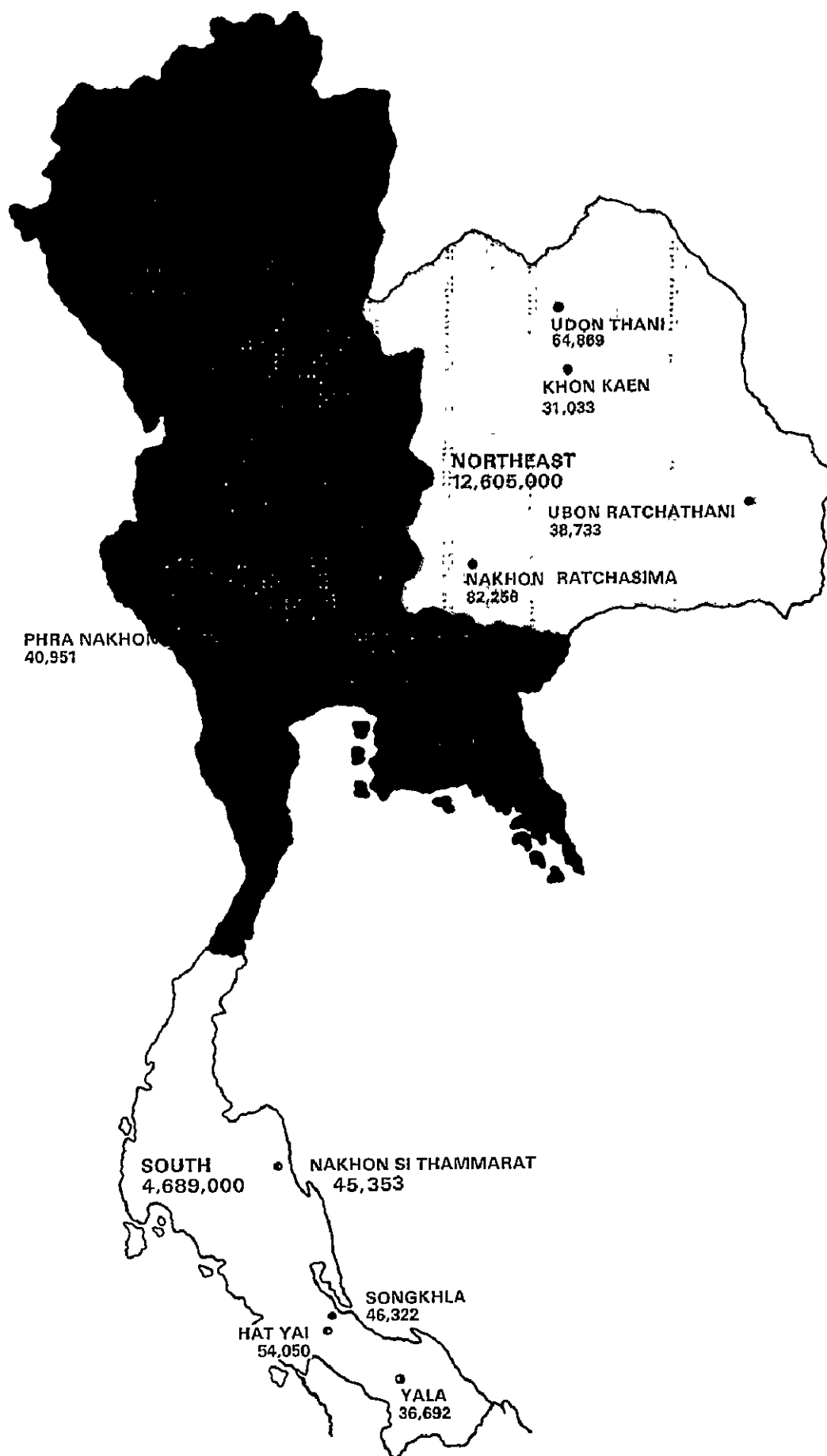
Some of the reasons why it was necessary for Thailand to adopt a national population policy are illustrated in the diagrams contained in this booklet. They show the current and projected population trends in Thailand, and some of the benefits that would result from a reduction of the current high rate of population growth.

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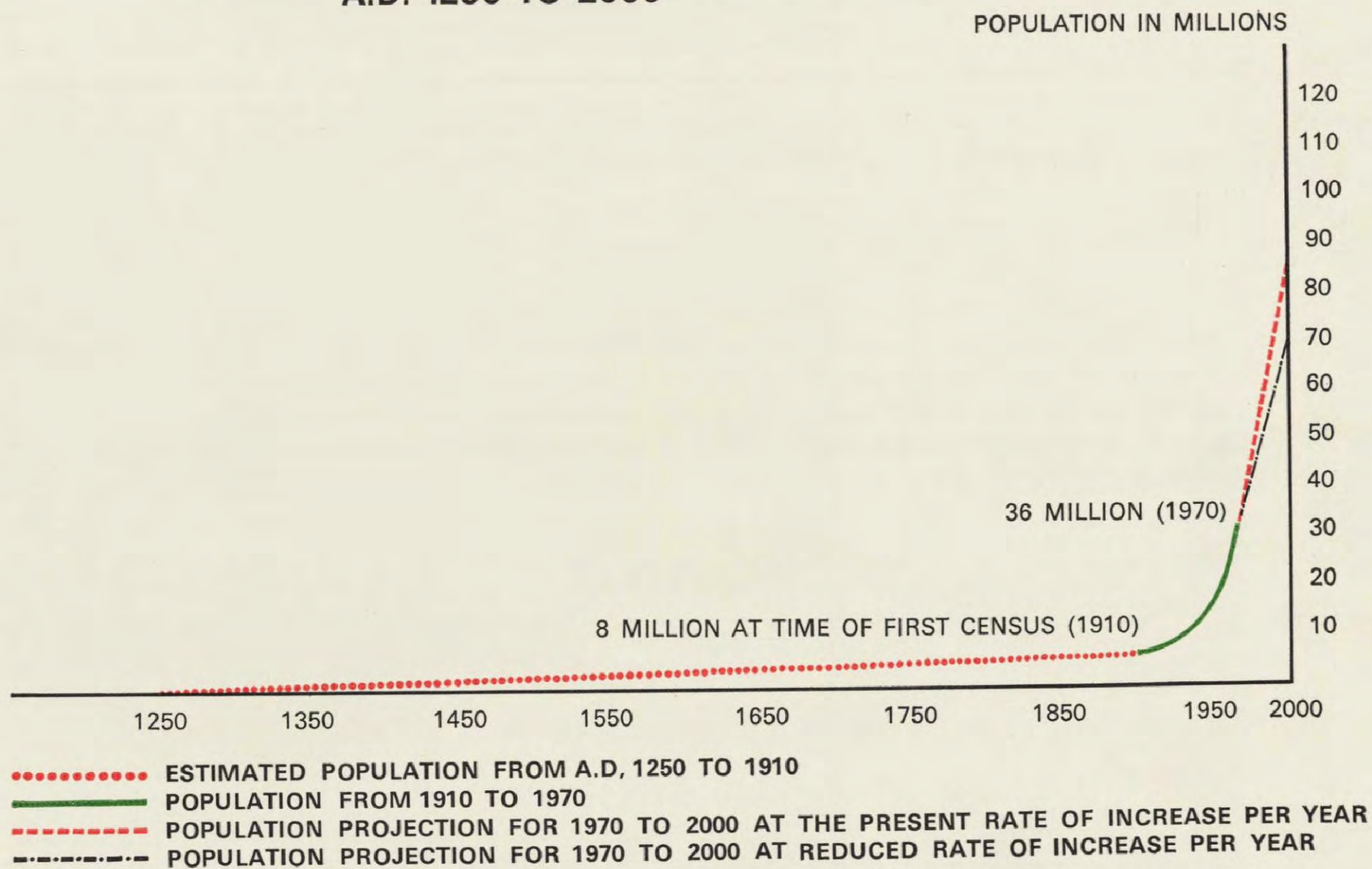
BASIC DATA, 1971 (Midyear Estimates)

Total population	37,399,000
Population, Bangkok-Thonburi	3,368,000
Married women, aged 15-44	4,736,970
Children under age 15	16,377,000
Population density	70 per square km.
Crude birth rate	41 per 1,000 people
Crude death rate	11 per 1,000 people
Rate of natural increase	3.0 %
Population increase per year (1970)	1,182,000
Percentage of population residing in rural areas	85 %
Percentage of population of Buddhist religion	94 %
Percentage of population employed as farmers	80 %
Labor Force	17,000,000
Female Labor Force	8,000,000
Number of provinces (changwat)	71
Number of districts (amphur)	556
Number of sub-districts (tambol)	5,036
Number of villages (muban)	59,934



The population of Thailand is presently increasing at a rate of approximately 3.0% per year, among the highest in the world. The goal of the third 5 year plan is to reduce this population growth rate to 2.5% by 1976, and, assuming the decline continues thereafter, the population will reach approximately 70 million by the year 2000. If, on the other hand, the present rate of growth continues, Thailand's population will double in about 23 years and will reach approximately 90 million by the year 2000.

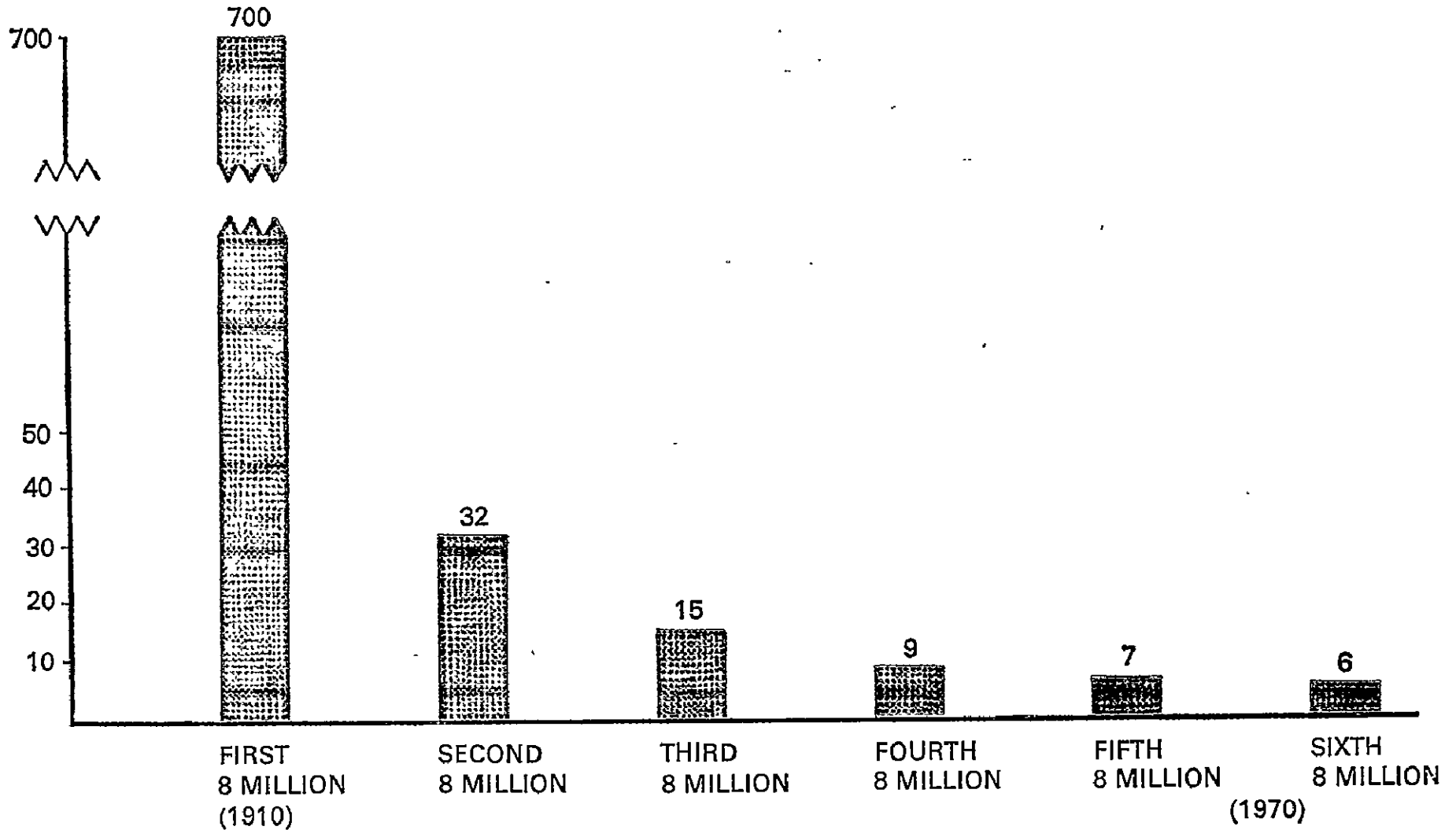
THAILAND'S POPULATION GROWTH A.D. 1250 TO 2000



Until 1900, Thailand's rate of population growth was slow and probably did not create serious economic or social problems. It took over 700 years, from 1200, the date taken as the beginning of Thai history, to 1910, to reach a population of 8 million people. But during the ensuing 60 years, the time needed to add each additional 8 million people has decreased rapidly until, at present, it takes only 7 years. Similarly, in the past, it took approximately 100 years to add 1 million people; today it takes less than one year.

YEARS REQUIRED TO ADD EIGHT MILLION PEOPLE SINCE A.D. 1200

NUMBER OF YEARS



The population of Thailand in mid-1971 is estimated to have reached 37,399,000. With the present numbers of births and deaths per year, this means that currently well over one million more persons are born annually than die. On a monthly basis almost 100,000 persons are being added to the population. This represents an addition each month approximately equal to the size of Chiangmai, Thailand's second largest city. Every day over 3,000 more persons are being born than die. Every hour the population is growing by 135 persons and every minute over two new persons are added.

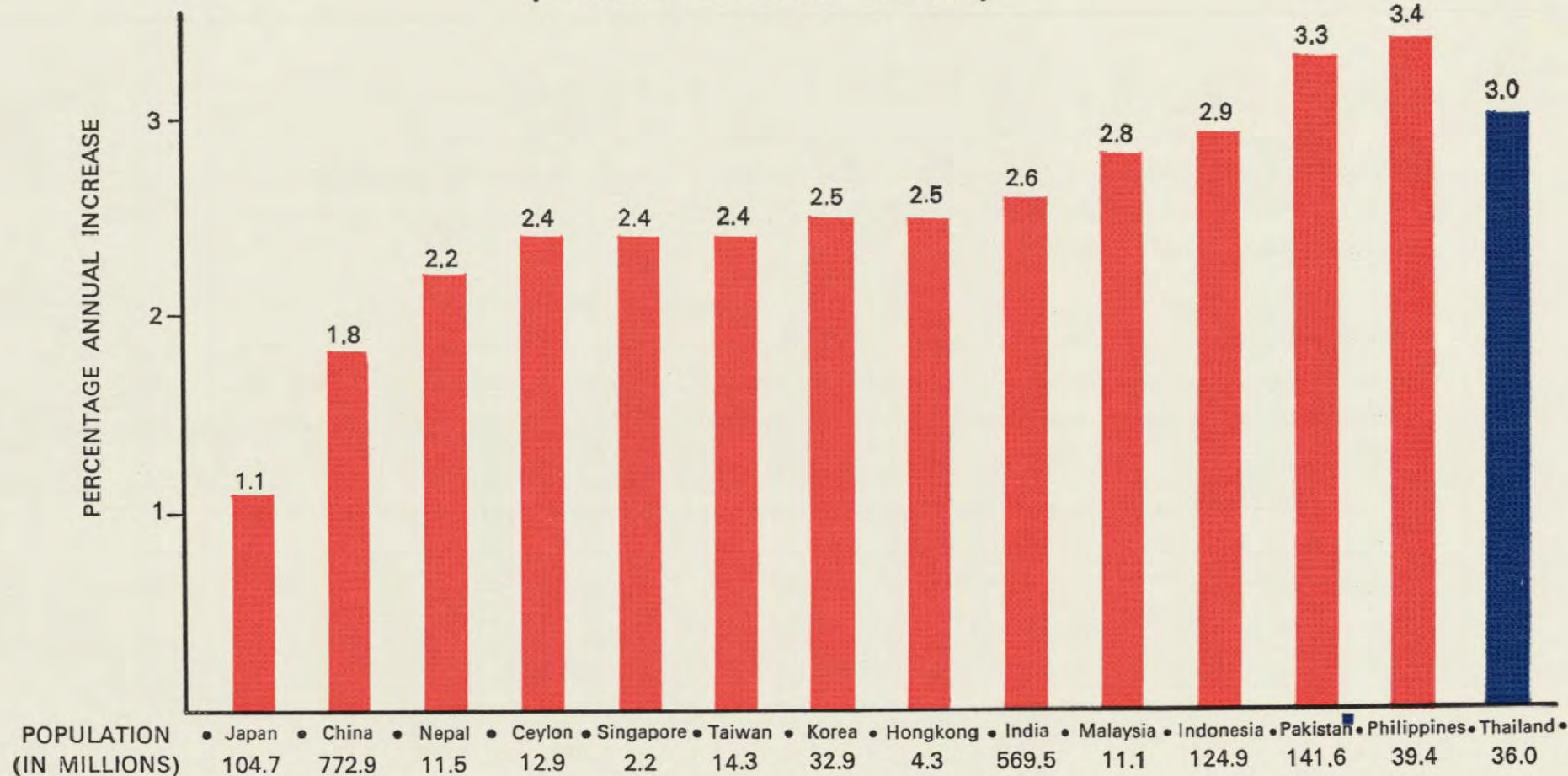
**ESTIMATED NUMBER OF BIRTHS AND DEATHS AND
RESULTANT POPULATION INCREASE, THAILAND, 1971**

	NUMBER OF BIRTHS	NUMBER OF DEATHS	POPULATION INCREASE
PER YEAR	1,525,131	343,323	1,181,808
PER MONTH	127,094	28,610	98,484
PER WEEK	29,329	6,602	22,727
PER DAY	4,178	941	3,237
PER HOUR	174	39	135
PER MINUTE	2.9	0.7	2.2

ESTIMATED POPULATION OF THAILAND, MID-YEAR 1971: 37,399,000

Many Asian countries have adopted national population programs attempting to lower the rate of population growth, as well as to promote better maternal and child health. These countries include India, with a population of more than five hundred million and Singapore, with only two million, as well as the Philippines, with the very high growth rate of 3.4 % a year and Japan, with a rate of only 1.1 % a year.

RATE OF POPULATION GROWTH OF ASIAN COUNTRIES WITH NATIONAL POPULATION PROGRAMS COMPARED TO THAILAND **(LATEST ESTIMATE, 1971)**



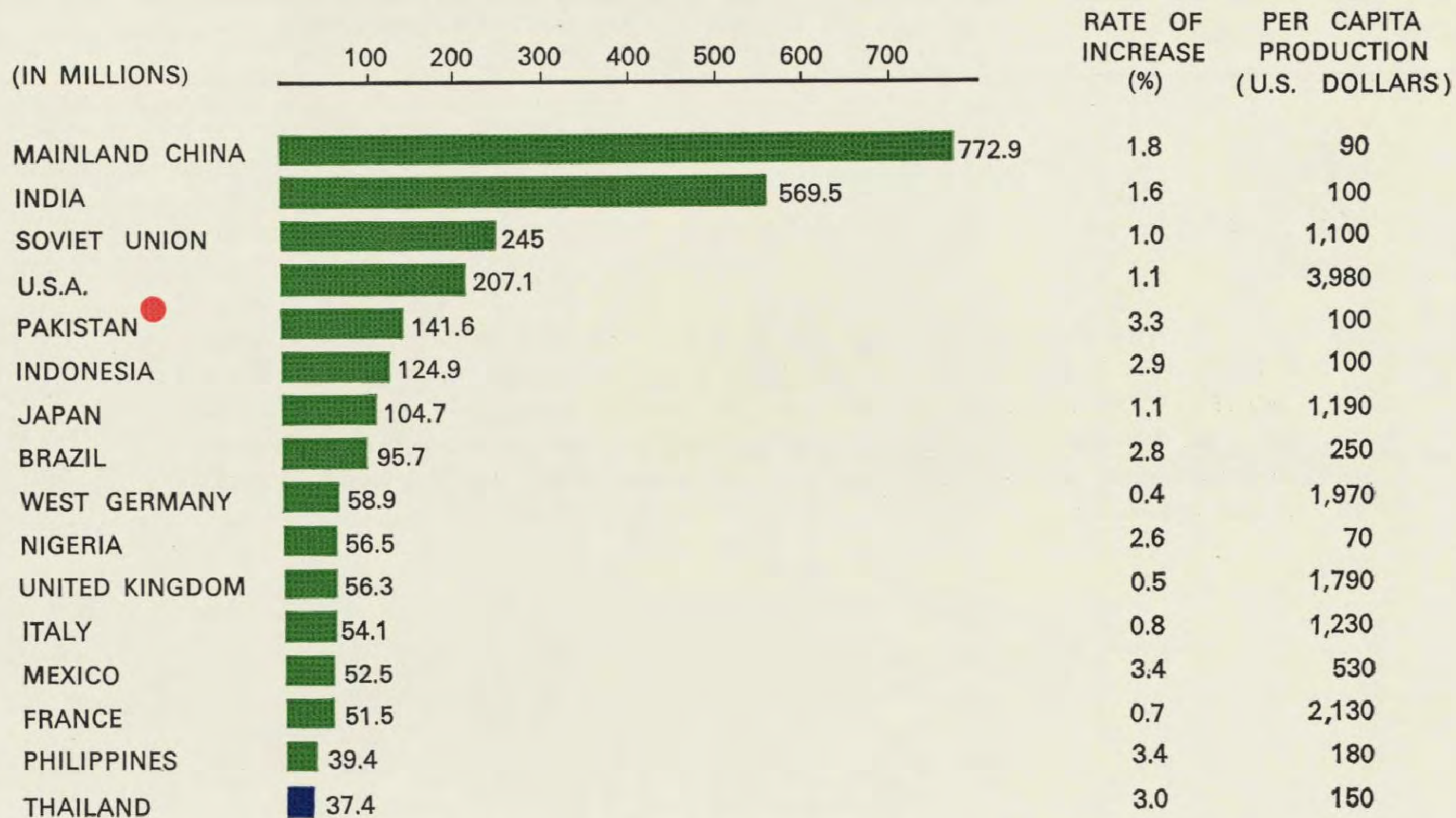
■ THESE FIGURES DO NOT TAKE INTO ACCOUNT THE POLITICAL
DISTURBANCES AND CHANGES IN 1971

The size of a population need not have a direct relationship to per-capita production. Some countries with large populations have lower per-capita production than other countries with small populations. India's population, for example, is almost 10 times that of West Germany, but West Germany has a per-capita production 20 times that of India.

An overly-large population can be a major obstacle to the development of higher production capabilities. This is because the government must shoulder such large burdens for education, public health, and consumer services that there is little money left for economic development. Modern understanding has, therefore, eliminated the old belief that the greater the population, the more prosperous and secure a country will be.

The major factors in the development of a country include its social and cultural patterns, the natural resources available, the levels of investment achieved and the quality, rather than quantity, of the population.

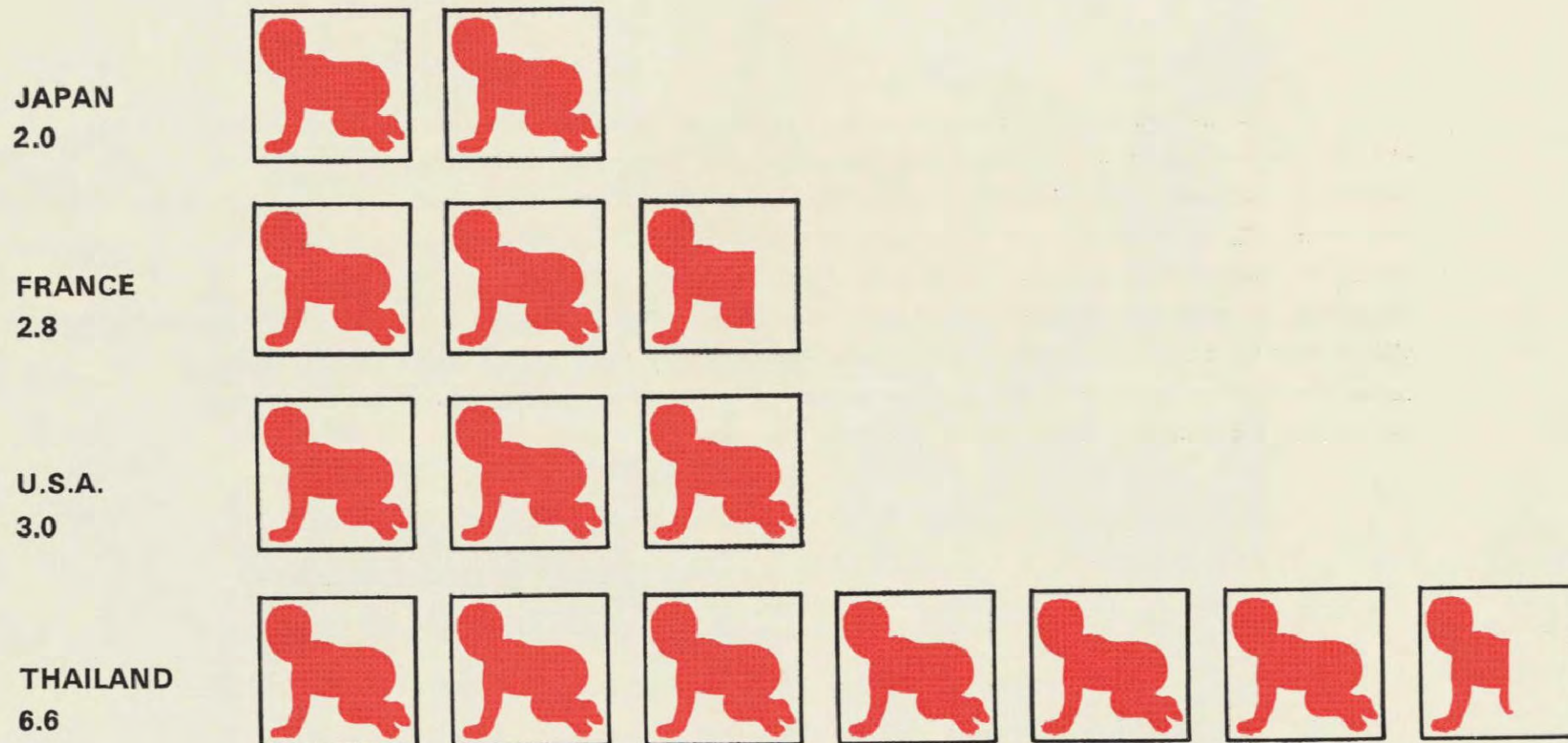
THE SIXTEEN LARGEST COUNTRIES IN THE WORLD (1971)



THESE FIGURES DO NOT TAKE INTO ACCOUNT THE POLITICAL DISTURBANCES AND CHANGES IN 1971

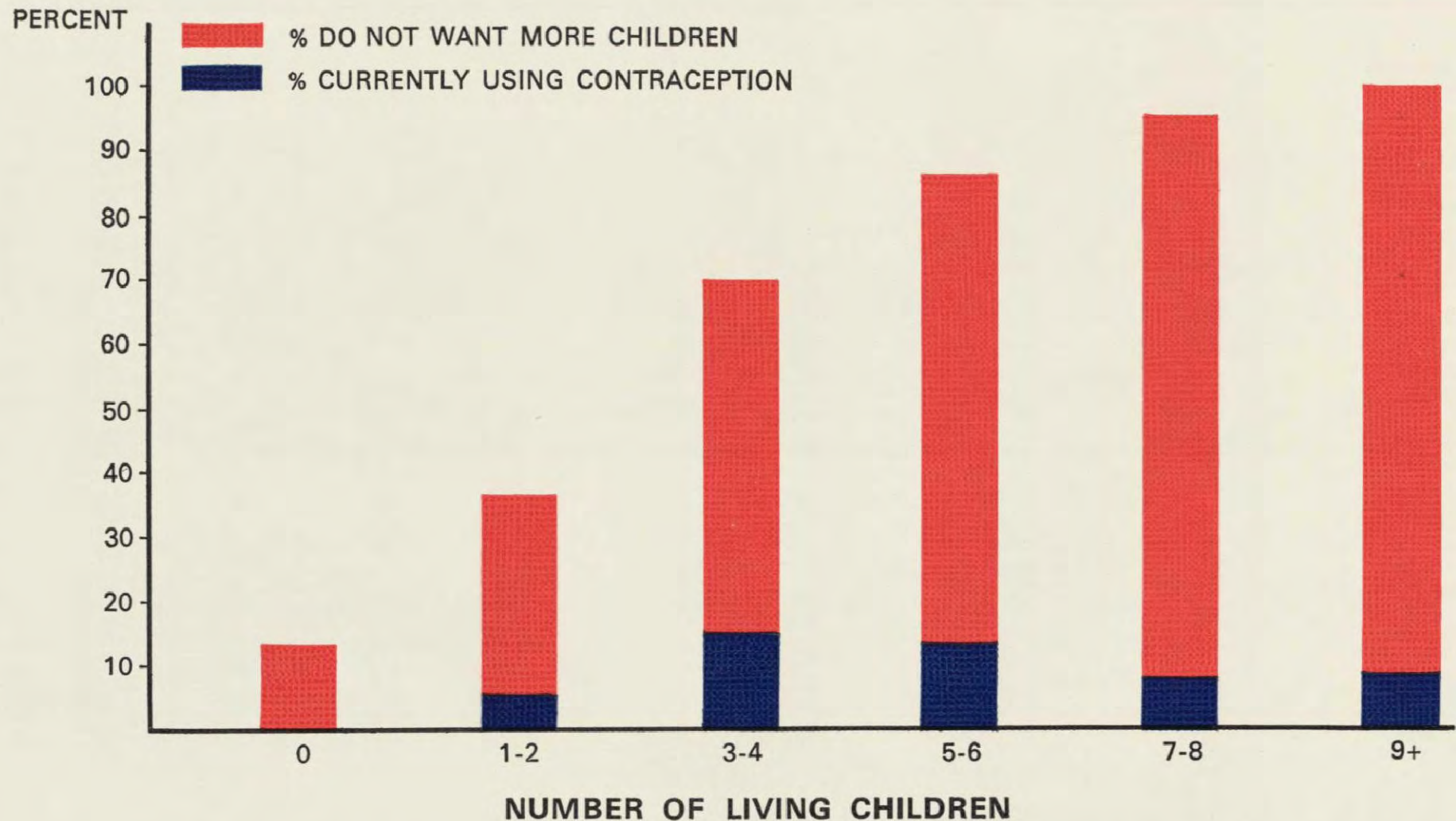
Rural surveys, such as the 1969 phase of the National Longitudinal Study of Social, Economic, and Demographic Change have shown that women living in rural areas have an average of 6.6 live births in their lifetime. This is more than double the number in industrialized nations. These same surveys have also shown that the women, on the average, want only four children. All such surveys have tended to show that rural Thai women have more children than they wish, primarily because they do not know of modern methods of contraception.

**AVERAGE NUMBER OF CHILDREN EVER BORN
PER WOMAN COMPLETING THE CHILD-BEARING AGE**



In Thailand, as in other countries, the proportion of women who no longer want any additional children increases rapidly with the number of living children they already have. According to the 1969 National Longitudinal Survey of rural Thai women, almost all married women who have no living children want some. The majority of those who have 3 or 4 living children, however, wish to stop their child-bearing and practically all women with 7 or more children no longer wish to add to their current family. In contrast, the proportion of women who practice contraception and hence can avoid conceiving an unwanted child is very low regardless of the number of children they already have. This suggests that appropriate means of contraception are either not known or not accessible to large numbers of Thai women who would like to limit (or space) the future number of children they will have.

DESIRE FOR NO ADDITIONAL CHILDREN AND USE OF CONTRACEPTION AMONG RURAL THAI WOMEN, 1969



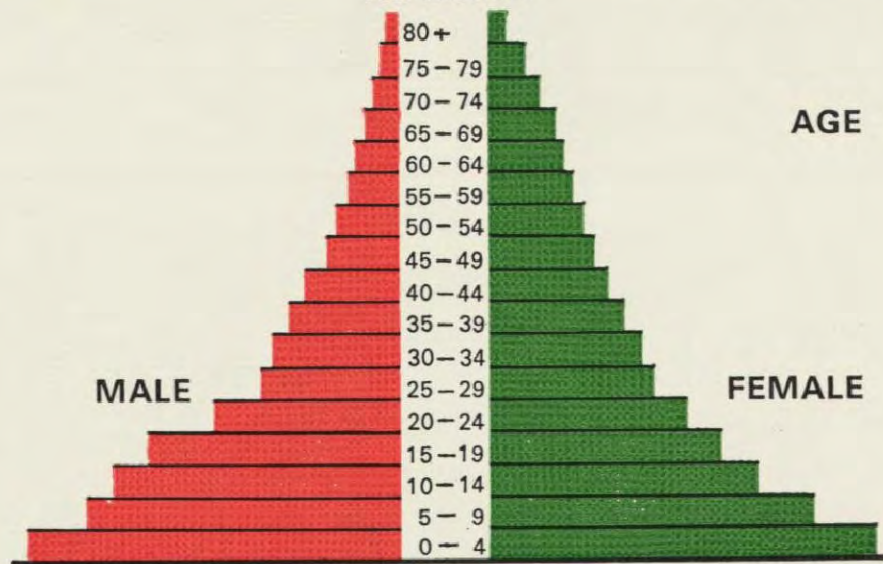
The present high rate of population growth, resulting from a high level of fertility and a sharp drop in the level of mortality, affects the age structure of the country by increasing the proportion of dependents under age 15. When the proportion of children is high, each working person has a heavy burden. In Thailand, there are 89 dependents for every 100 persons of working age, as compared with 32 dependents for every 100 working-age adults in Sweden. Moreover, in the highly industrialized countries, the average worker produces more goods and earns more income than the average worker in Thailand. Therefore, the former can afford larger investments in such areas as education for their children, thus further improving prospects for the future.

DEPENDENCY RATIO, 1970.

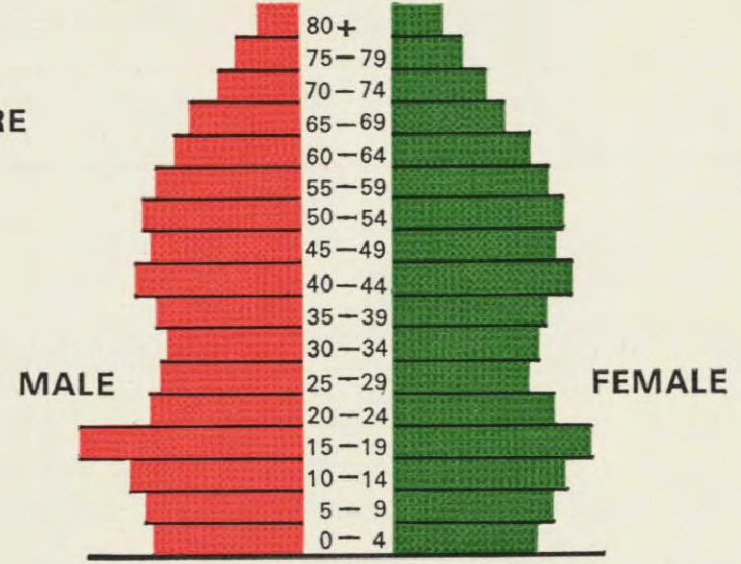
THAILAND

SWEDEN

AGE STRUCTURE



9 8 7 6 5 4 3 2 1 0 0 1 2 3 4 5 6 7 8 9
HIGH BIRTH RATE, RAPIDLY FALLING DEATH RATE



5 4 3 2 1 0 0 1 2 3 4 5
LOW BIRTH RATE, SLOWLY FALLING DEATH RATE



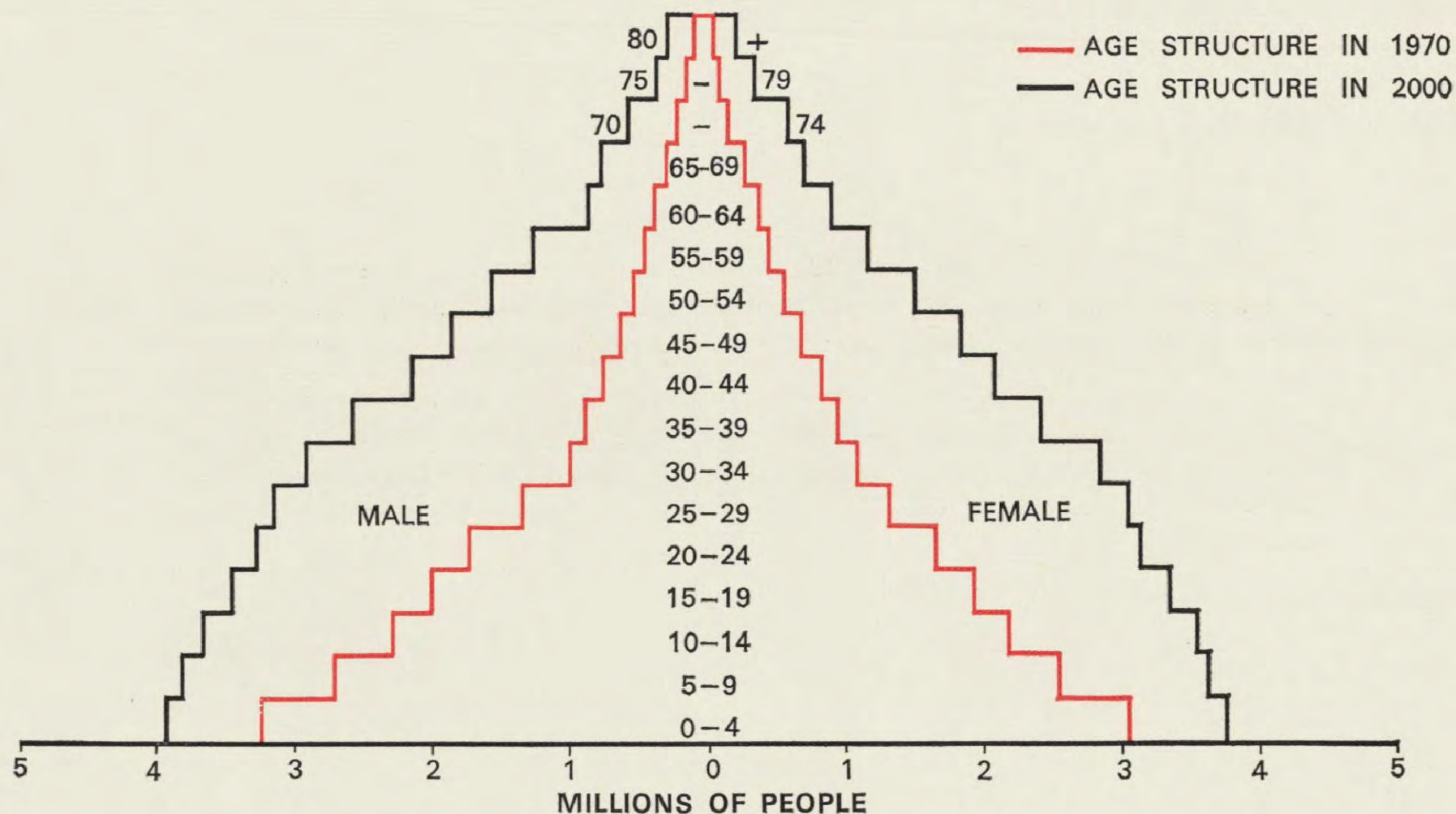
100 PERSONS OF WORKING AGE HAVE TO
SUPPORT 89 CHILDREN UNDER AGE 15.



100 PERSONS OF WORKING AGE HAVE TO
SUPPORT 32 CHILDREN UNDER AGE 15.

Thailand's labor force will increase in the future, no matter how successful the national family planning program may be. The number of children will also continue to increase, unless the birth rate falls very rapidly indeed. A successful family planning program will, however, result in a decrease in the ratio of children to working age adults (from .89 in 1970 to .51 in the year 2000), which, in turn, will allow parents better to care for their children. Thus, assuming a successful national family planning program, the age pyramid shows that the bulk of the increase in the population by the year 2000 will be in the ages between 15 and 50, the productive years. Because health care for children being born at present is improving rapidly, more children will remain alive after birth and the improved health will result in a higher quality of the future labor force.

AGE STRUCTURE OF THAILAND POPULATION, 1970 AND 2000



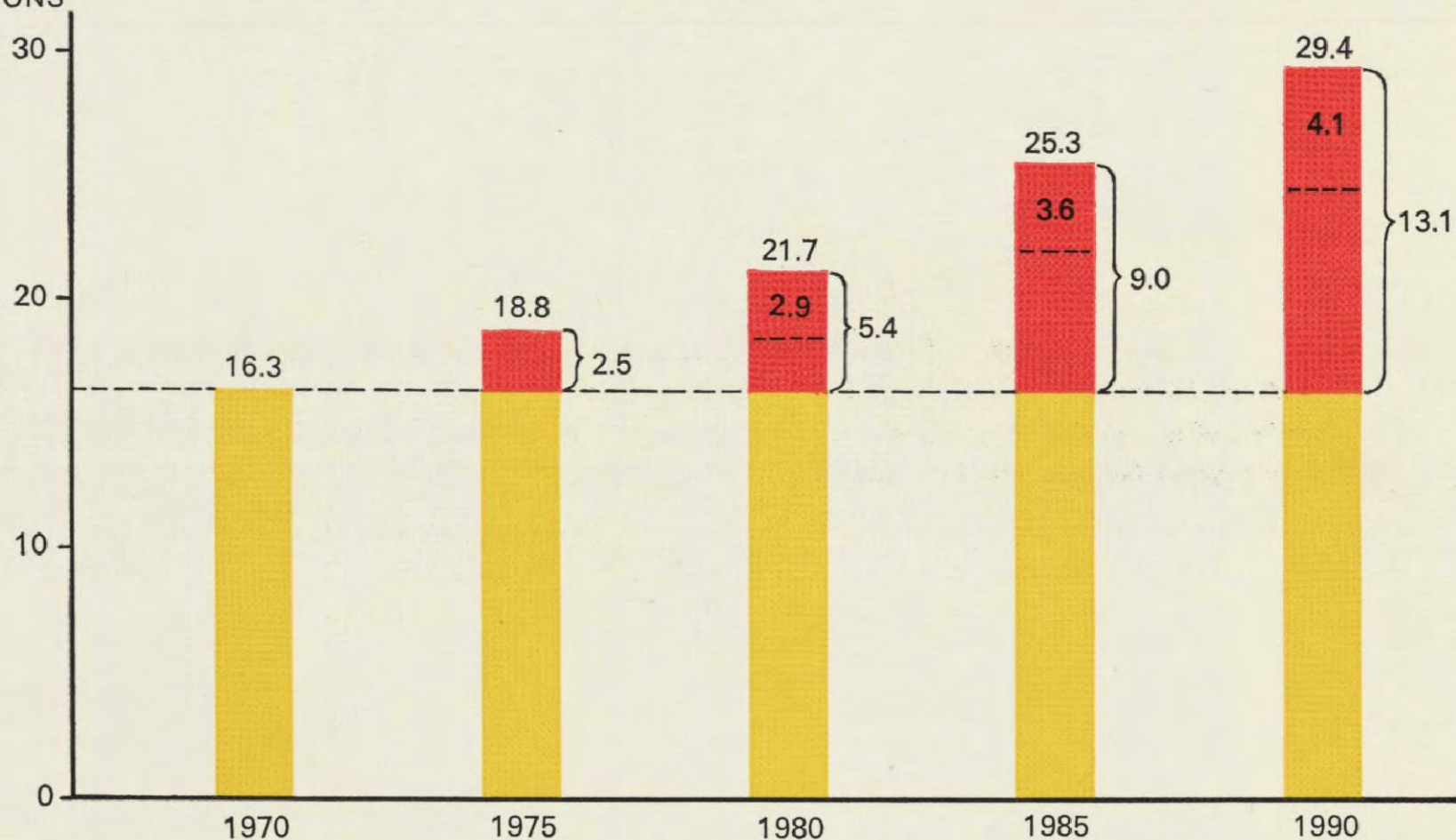
THE ASSUMPTION IS MADE THAT THE FERTILITY RATE WILL BE HALVED IN 30 YEARS AND THAT THE DECLINE IN THE 1970-76 PERIOD WILL BE CONSISTENT WITH THE TARGET OF THE NATIONAL FAMILY PLANNING PROGRAM.

In 1970, the labor force of Thailand was estimated to be 16.3 million, of which approximately 47 percent were females. In 1990, only 20 years from now, the projected size of the labor force will almost double. It will, therefore, be necessary to create sufficient numbers of new jobs in proportion to this increase.

During the five year period, 1970-1975, the need for new jobs will increase by approximately 2.6 million. The demand will continue to increase even more rapidly thereafter, resulting in a requirement of more than 4 million new jobs during the period, 1986-1990. Family planning will help to retard the rate of growth of the labor force in the long run, thereby tending to decrease under-employment and actual unemployment.

LABOR FORCE IN THAILAND (1970-1990)

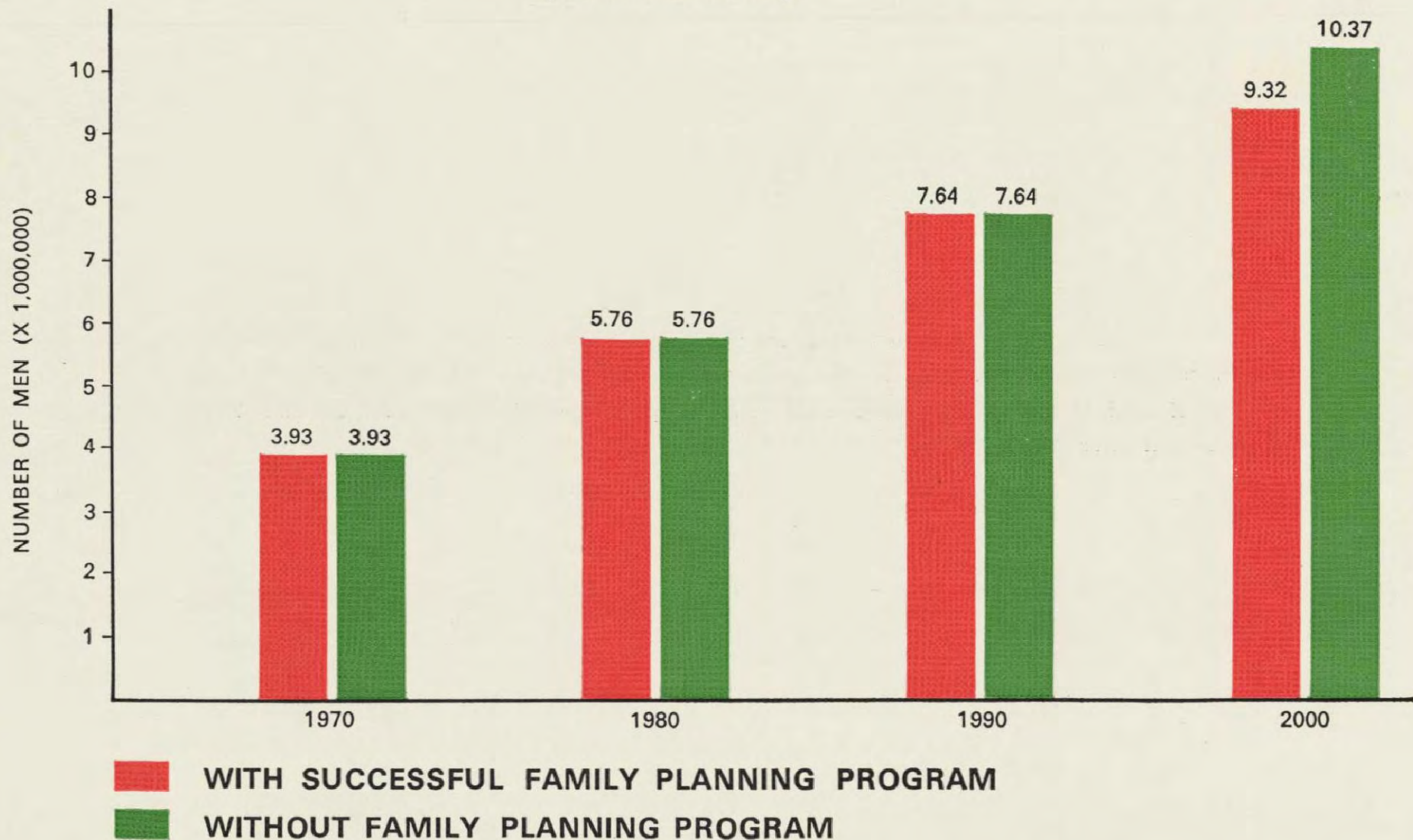
LABOR FORCE
IN MILLIONS



NOTE: PROJECTION OF LABOR FORCE IS BASED ON MEDIUM POPULATION PROJECTION
AND PROJECTED TRENDS IN THE PROPORTION ECONOMICALLY ACTIVE IN EACH
AGE AND SEX GROUP.

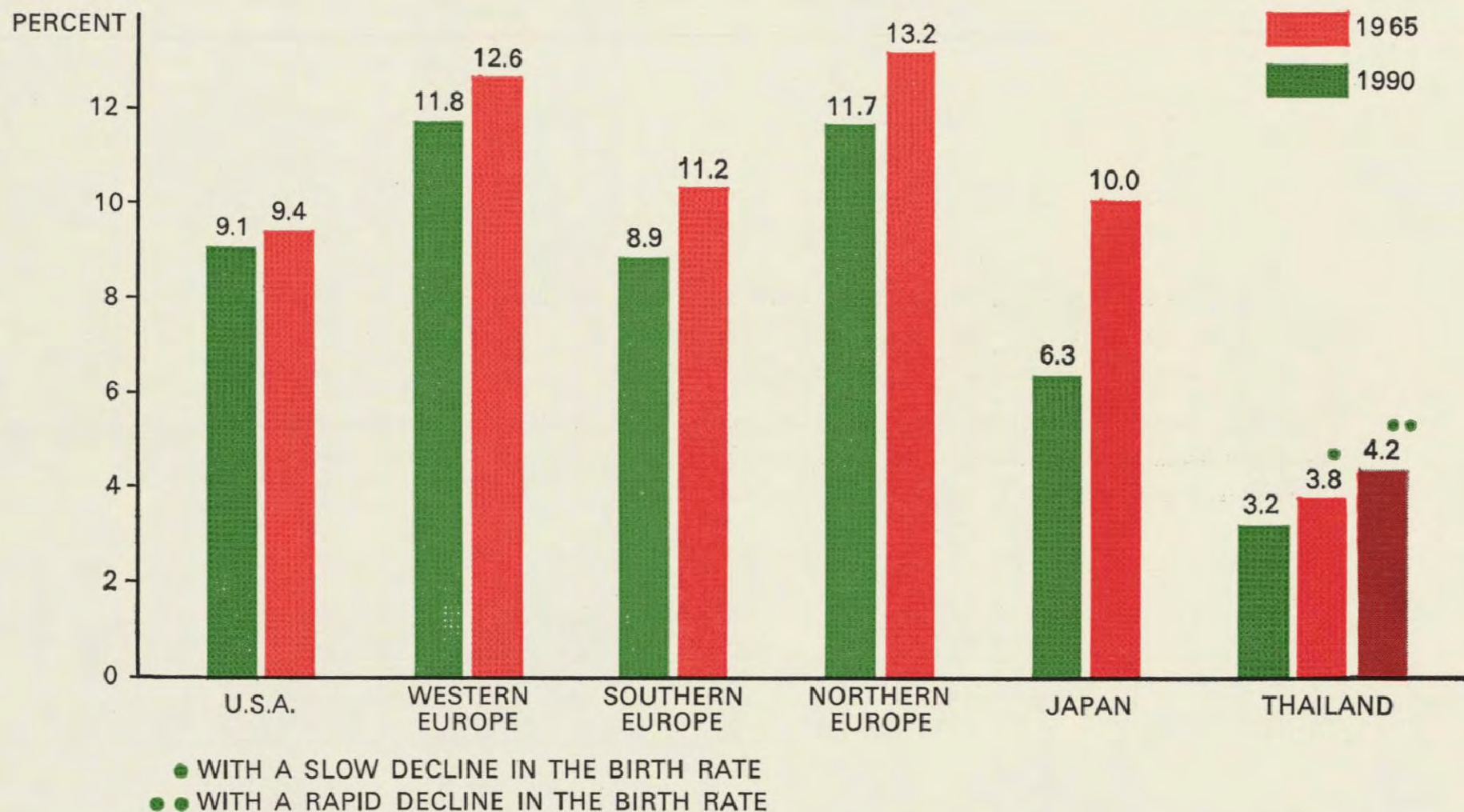
Even with a successful family planning program, the number of young men between the ages of 20 and 34, available for military service, will continue to increase rapidly. During the next 21 years, the numbers of men in this age group will double no matter how rapidly the birth rate falls, because most of these potential future soldiers have already been born.

**NUMBER OF MEN AGED 20 TO 34 IN THAILAND
IN 1970, 1980, 1990 AND 2000
(IN MILLIONS)**



Thailand has an extremely low percentage of people over the age of 65, in comparison to most western countries. The percentage in Thailand will increase gradually if there is a successful family planning program, although at the end of an additional 20 years, the percentage will still remain significantly lower than the same percentages in the west.

PERCENTAGE OF POPULATION 65 AND OVER, 1965 AND 1990

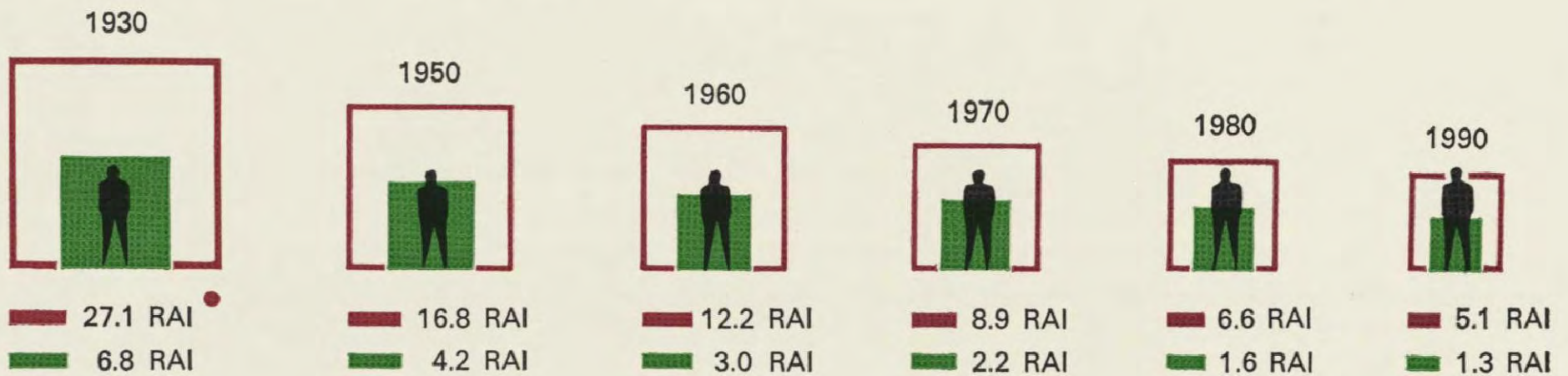


(FIGURES FOR ALL COUNTRIES EXCEPT THAILAND BASED ON UNITED NATIONS MEDIUM PROJECTIONS)



Thailand has a land area of 321,250,000 rai (200,128 square miles), but only about 1/4 of this area is suitable for cultivation. Consequently, when analyzing the density of the population, it is necessary to take into consideration both the total land area and the arable land.


Nearly all of the land that is suitable for cultivation has already been put to use. Thus, when the population increases, the amount of cultivatable land per person must decrease. By 1990, or in another 20 years from now, there may be only 1.3 rai per person.

AMOUNT OF LAND PER PERSON



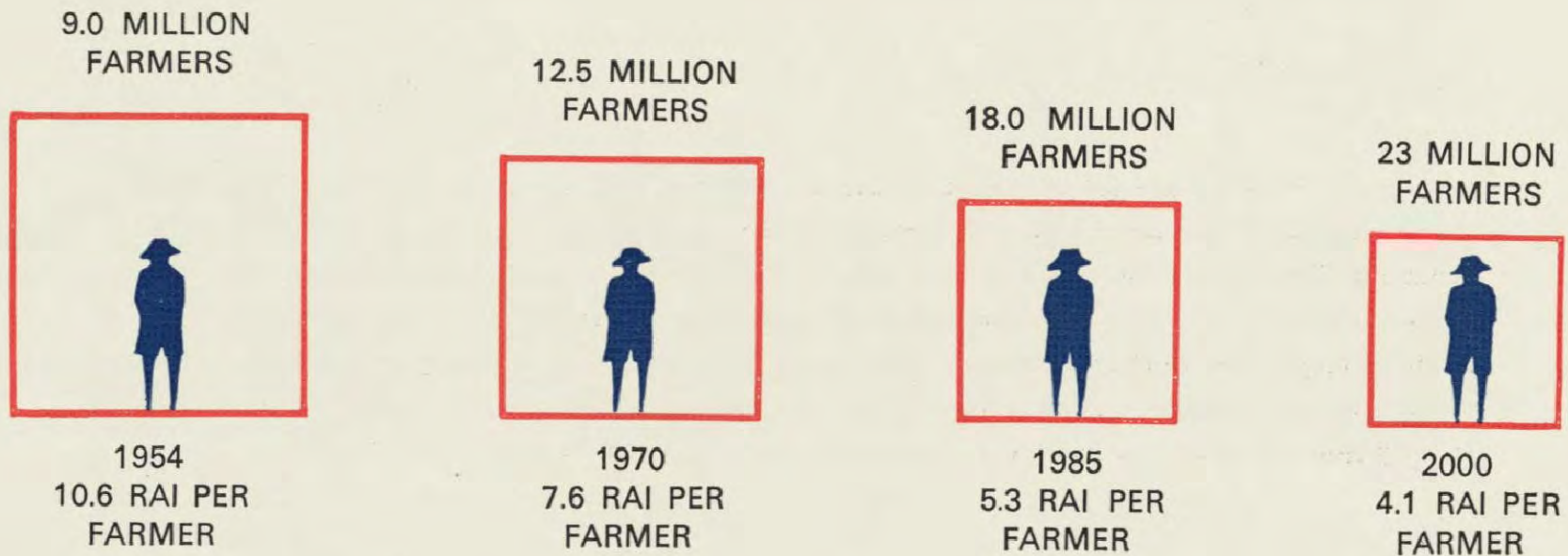
ARABLE LAND AREA.....80,000,000 RAI

 AMOUNT OF LAND PER PERSON
 AMOUNT OF ARABLE LAND PER PERSON

 1 RAI EQUALS 0.4 ACRE

The amount of land available for agricultural use, per farmer, will decrease progressively because of the rapid increase in the population. Estimates show that even though as much as two-fifths of the labor force in 1990 may be engaged in non-agricultural occupations (compared with about one-fifth of the present labor force), the ratio of land per farmer will decrease to only 4.1 rai, which is approximately half of the present figure of 7.6 rai. Therefore, if incomes of farm families are to be raised, sharp increases in production per rai will have to be achieved.

AMOUNT OF FARMLAND PER FARMER 1954-2000



95 MILLION RAI OF FARMLAND

NOTE : BASED ON MEDIUM POPULATION PROJECTION AND DETAILED PROJECTIONS OF THE LABOR FORCE UP TO 1985, CONTINUED TO THE YEAR 2,000 ON THE ASSUMPTION THAT THE PERCENTAGE OF THE LABOR FORCE ENGAGED IN FARMING WILL DECREASE TO 60% OF THE LABOR FORCE

While the national population is increasing at a rate of 3 percent per year, the population in the Municipality of Bangkok-Thonburi is increasing at the rate of almost 5 percent per year. Such a rapid increase in Bangkok-Thonburi is due, in large part, to the migration of people from rural areas. When land becomes scarce for farming (as is now happening), a high rate of population growth ensures a continual influx of people from rural areas into the larger cities looking for jobs. If the present trend continues, the population in Bangkok-Thonburi will reach almost 7 million in 20 years. Unfortunately, the metropolis is not prepared to handle the immense problems that will be generated by such a rate of growth.

POPULATION IN THE MUNICIPALITY OF BANGKOK-THONBURI



1950—POPULATION OF 1.0 MILLION



1960—POPULATION OF 1.8 MILLION



1970—POPULATION OF 2.9 MILLION



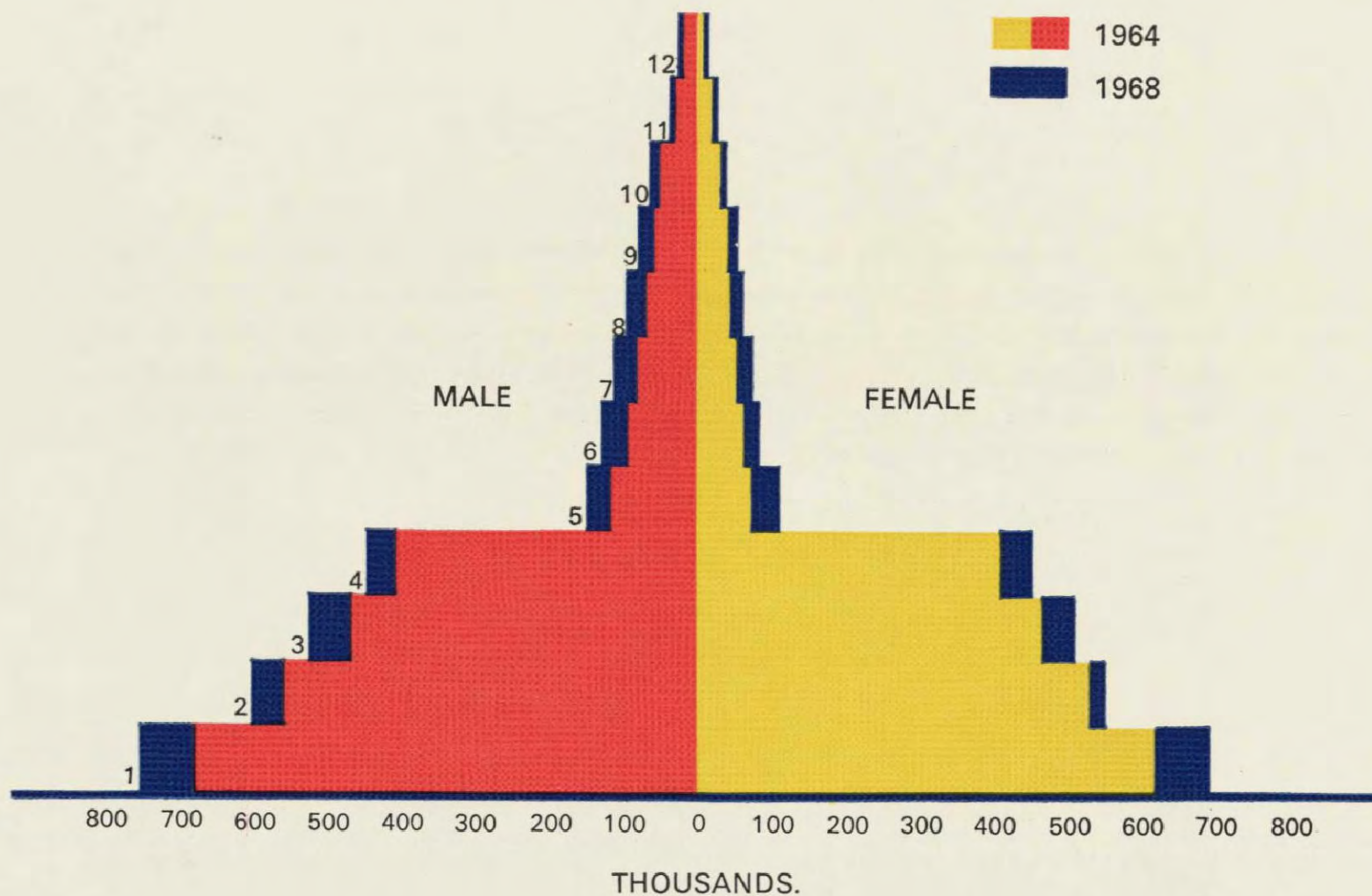
1980—POPULATION OF 4.4 MILLION



1990—POPULATION OF 6.7 MILLION

The vast majority of children in Thailand today complete 4 or less years of schooling. This constitutes one of the most pressing problems facing the field of education in view of the great desire and need for expanded educational opportunities. The present high rate of population growth markedly exaggerates an already critical problem.

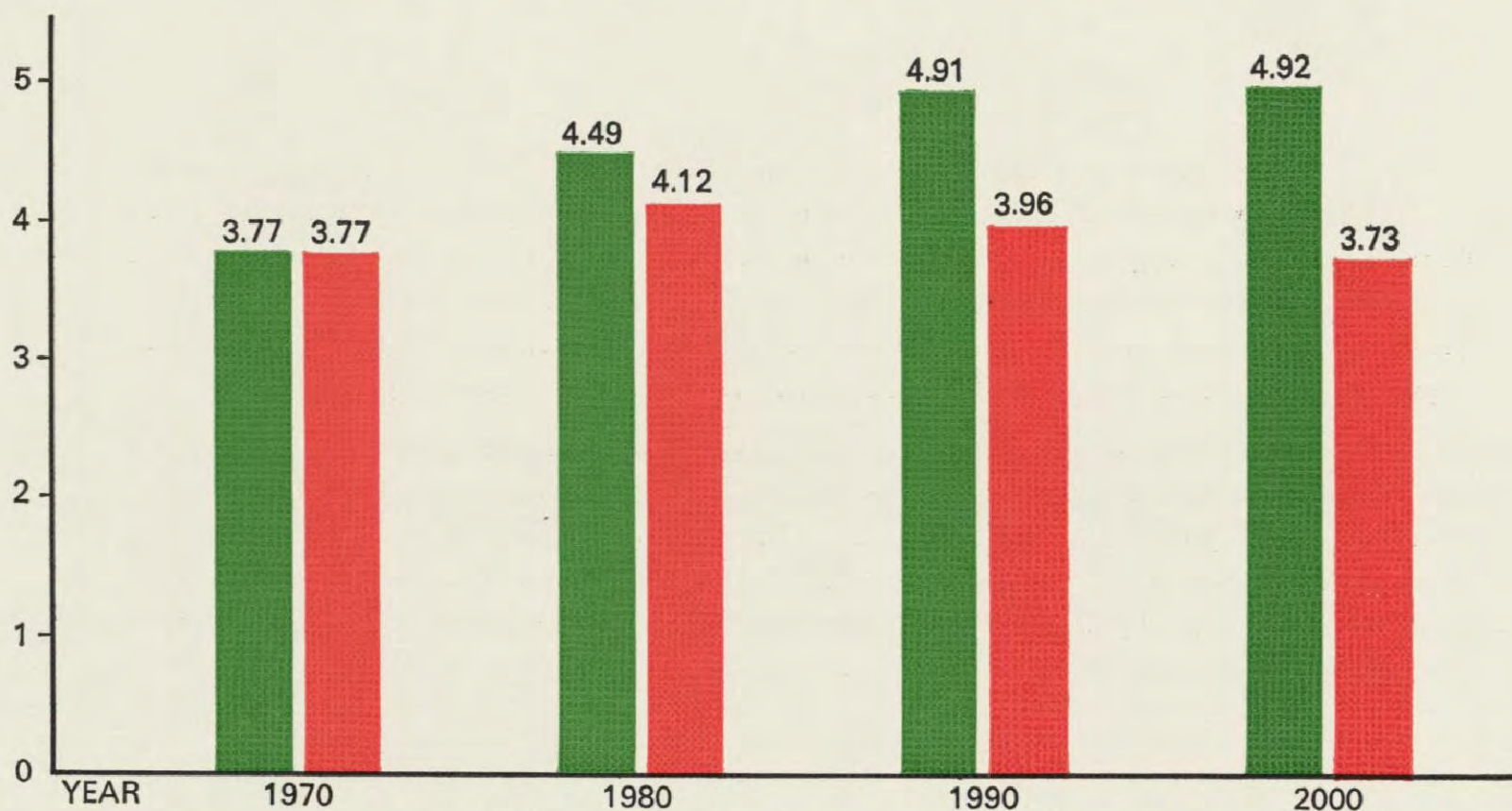
NUMBER OF STUDENTS IN SCHOOL, BY GRADE AND BY SEX, 1964-1968.



Thailand has committed itself to reaching the goal of seven years' compulsory education for all children by 1990. If fertility declines by 50% rather than only by 25% before then, a full one percent of the Gross National Product (G.N.P.) would be saved on educational costs annually between 1990-2000, and over the entire 30 year period between 1970-2000, an estimated total of Baht 107,135 million (US\$ 5,150 million) would be saved. Thus, the savings in educational costs alone would amply justify the government's population policy, although similar savings would also be achieved in the provision of other social services.

TOTAL EXPENDITURE FOR EDUCATIONAL IMPROVEMENT AS PERCENT OF GNP, 1970-2000, UNDER TWO FERTILITY ASSUMPTIONS.

% OF GNP



- ASSUMES FERTILITY DECLINE BY 25% WITHIN 30 YEARS
- ASSUMES FERTILITY DECLINE BY 50% WITHIN 30 YEARS, CONSISTENT WITH THE INITIAL TARGET OF THE NATIONAL FAMILY PLANNING PROGRAM.

At the present time, there is one doctor for approximately 7,000 people, a figure which is one-seventh the current international standard of one doctor for 1,000 people. Many additional doctors are needed in the next 20 years simply to maintain the present doctor-patient ratio. The numbers of doctors needed to meet the international standards would require the production of 3,200 doctors per year, as compared to the present actual production of 300 per year. To reach the desired doctor-patient ratio by the year 1990 would require the graduation of 64,000 physicians during the 20 year period, an obviously impossible task.

The problem is more complicated than simply the total number of doctors for the country as a whole. Almost one half of all Thai doctors are presently working in the Bangkok-Thonburi municipality, where the doctor: patient ratio is 1:1,000. For the remainder of Thailand, however, there is only one doctor for every 30,000 people. And, most significantly, when one subtracts the number of doctors working in the provincial capital city or town, there remains only one doctor for approximately 110,000 people in the rural areas of Thailand, where 85 percent of Thai people live.

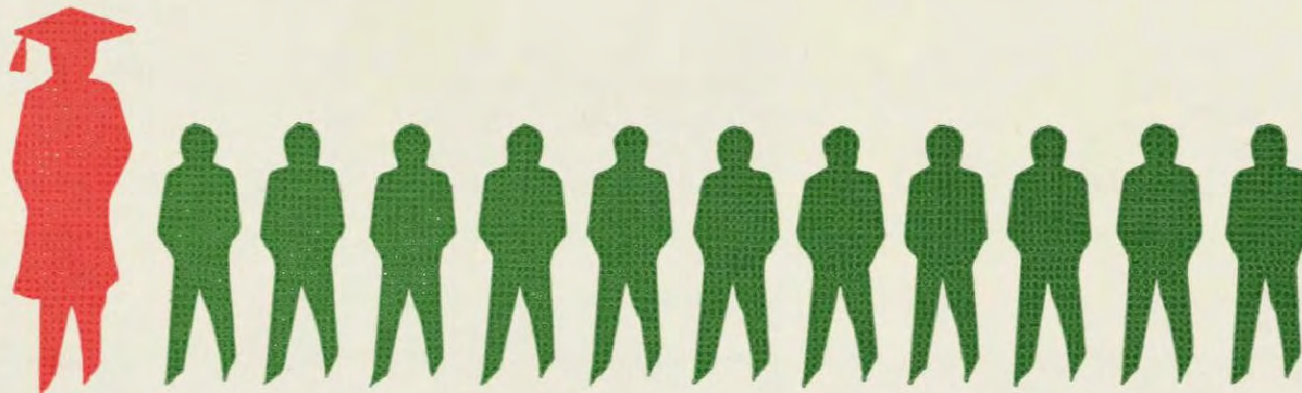
**RATIO OF DOCTORS TO POPULATION,
VARIOUS PARTS OF THAILAND, 1970.**



BANGKOK: 1 DOCTOR PER 1,000 POPULATION



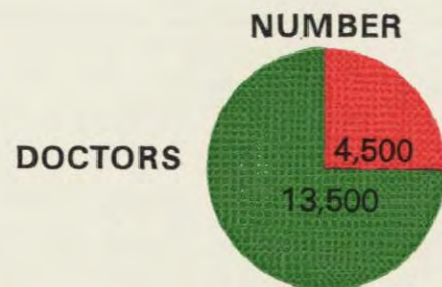
OUTSIDE BANGKOK: 1 DOCTOR PER 30,000 POPULATION.



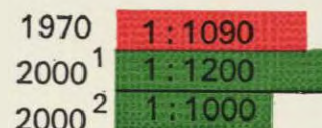
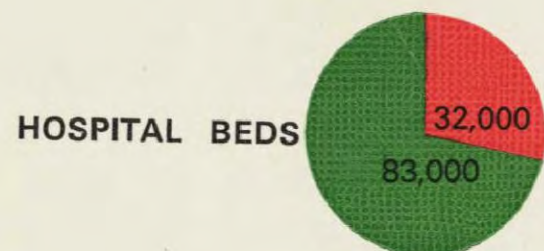
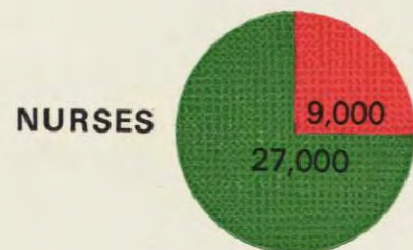
**OUTSIDE BANGKOK
(excluding provincial capitals):
1 DOCTOR PER 110,000
POPULATION**

Projections have been made as to the additional numbers of doctors, nurses, and other health personnel, as well as the additional number of hospital beds, that can be expected during the next 30 years. In spite of substantial increases in the total numbers, the ratio of these personnel and of beds to the total population will remain approximately the same or actually get worse if the present rate of population growth (3.0 %) continues. If the growth rate falls at a gradual rate over the next 30 years, there will be a definite improvement in the ratios of medical personnel and hospital beds to the total population.

COMPARISON OF NUMBER OF MEDICAL PERSONNEL AND NUMBER OF HOSPITAL BEDS TO POPULATION THAILAND: 1970 AND 2000



RATIO TO POPULATION

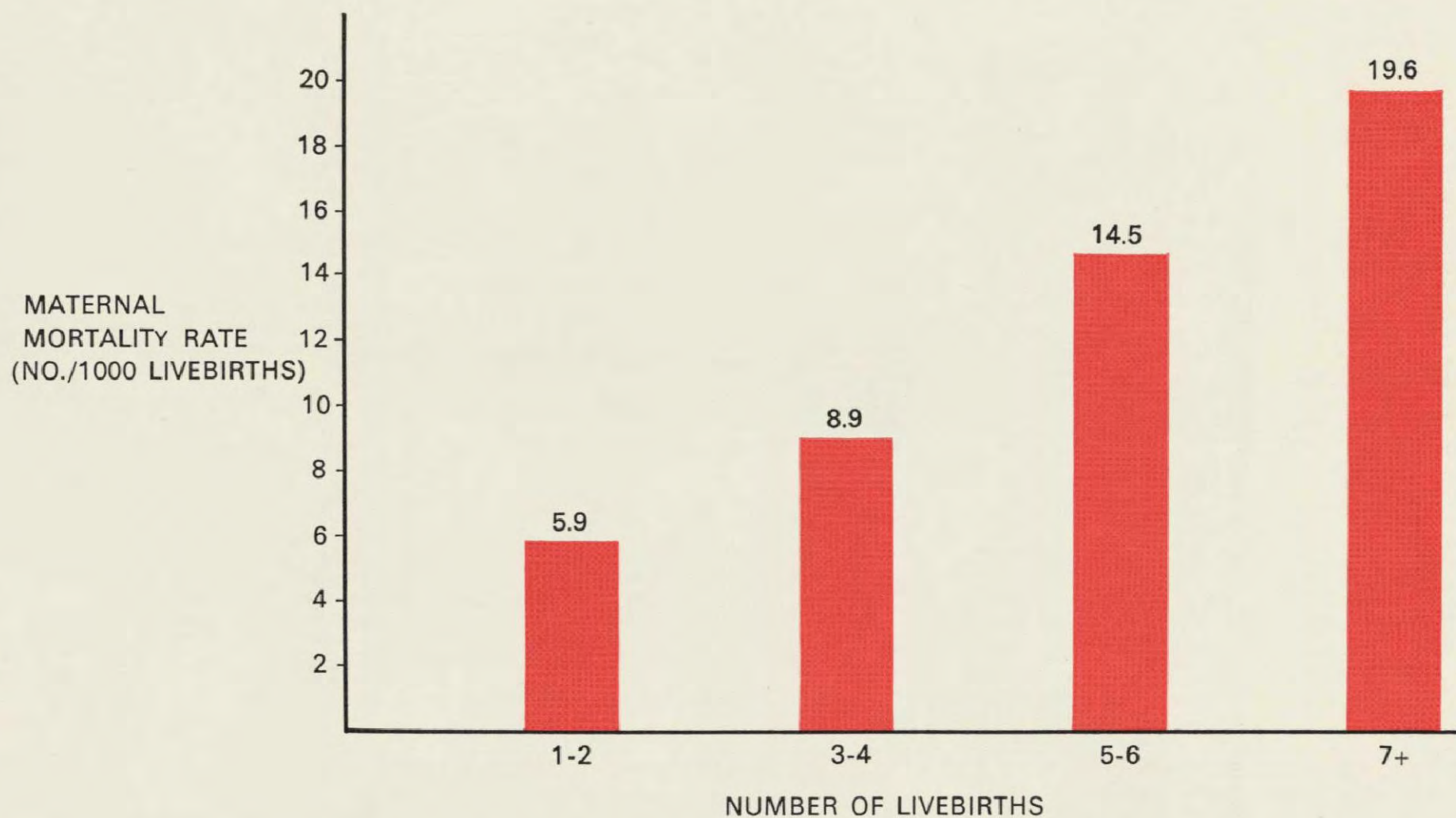


1970
2000

- 1 ASSUMING CONTINUATION OF PRESENT RATE OF POPULATION GROWTH
2 ASSUMING A GRADUALLY DECREASING RATE OF POPULATION GROWTH

Nationwide vital statistics reveal that the majority of maternal deaths in Thailand occur in older women. From age 25 onward, the older the mother is, the greater the chance of death during childbirth, with the highest frequency in women aged 35 or older. Family planning would have a significant effect in reducing mortality among the latter women, since the majority of them, according to surveys in Thailand, already have their desired number of children.

MATERNAL MORTALITY RATES BY NUMBER OF LIVEBIRTHS THAILAND PROVINCIAL HOSPITALS, 1966.



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